Desk Statement:

EPA to support NDEE with new air sampling at the former AltEn facility in Mead, Nebraska, from May 31 to June 2, 2022

In response to a request from the Nebraska Department of Environment and Energy (NDEE), from May 31 to June 2, the U.S. Environmental Protection Agency (EPA), with assistance from NDEE personnel, will conduct new air sampling to identify foul-smelling compounds at and near the former AltEn ethanol facility in Mead, Nebraska, weather permitting.

NDEE is the lead regulatory agency over the former AltEn facility, and has conducted numerous other sampling efforts including groundwater, surface water, air, waste material, and soil.

In September 2021, following a request from NDEE, EPA and NDEE personnel conducted what is called targeted screening-level air monitoring on and near the facility using stationary and mobile (a specialized pickup truck with monitoring devices) air monitoring tools. EPA used targeted sampling methods to look for specific compounds including, hydrogen sulfide, methane, benzene, toluene, p-xylene and sulfur dioxide.

For the May 31 to June 2 sampling effort, EPA will be using an approach called "non-targeted analysis" (NTA). The tools and techniques used in this approach allow the agency to screen for compounds from among thousands of chemicals, rather than a small set of specific chemicals. In the laboratory analyses of the samples, EPA uses high-tech equipment and advanced computers to find chemicals that would have otherwise gone unnoticed using targeted methods.

However, there are limitations in how NTA sampling and laboratory analytical results can be used. NTA produces qualitative results that do not estimate the concentration of chemicals, which is necessary to assess potential human exposure levels and health risks.

EPA will provide the resulting data and the laboratory results to NDEE.

For current information regarding the AltEn facility, please visit NDEE's web page: [HYPERLINK "http://dee.ne.gov/Press.nsf/pages/AltEn"].

Background:

EPA will use high-resolution mass spectrometry (HRMS) instruments to measure the mass and pattern of elements found in the samples that will be taken at and near the former AltEn facility. When EPA scientists compare the results of this high-resolution "snapshot" with a list of known chemicals they can identify the types of chemicals that are present in the samples.